

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A scanner comprising:
a transport mechanism for moving a document;
a sensor for detecting a leading edge and trailing edge of
said document;
a camera for scanning said document, detecting a leading
edge of said document, and detecting a trailing edge of said document; and
a controller which:
 - 1) receives a digital signal from said camera when said
camera detects said document in a field of said camera;
 - 2) receives a signal from said sensor when said sensor
detects said document in a field of said sensor;wherein said controller:
 - 1) starts image capture when a leading edge of said
document is detected by either said sensor or said
camera, and stops image capture when a trailing edge of
said document is detected by either said sensor or said
camera; and
 - 2) turns off a drive mechanism when a leading edge of
said document is detected by either said sensor or said
camera, and starts a drive mechanism when a trailing
edge of said document is detected by both said sensor
and said camera.
2. (original) A scanner as in claim 1 wherein image capture
begins after said camera detects a specified range of pixels greater than a
predetermined light level.

3. (original) A scanner as in claim 1 wherein image capture ends after said camera detects a specified range of pixels less than a predetermined light level.
4. (original) A scanner as in claim 1 wherein said controller comprises a microprocessor.
5. (original) A scanner as in claim 1 wherein said controller comprises a field programmable gate array (FPGA).
6. (original) A scanner as in claim 1 wherein said controller comprises a application specific integrated circuit (ASIC).
7. (original) A scanner as in claim 1 wherein said controller and said camera are a single unit.
8. (original) A scanner as in claim 1 wherein:
said controller activates said camera for image capture only during the presence of said document in said first camera field.
9. (original) A scanner as in claim 1 wherein said scanner comprises an automatic document feeder.
10. (cancelled)
11. (currently amended) A method of scanning a document as ~~in claim 10~~ comprising:
transporting said document past a sensor and a camera;
detecting a leading edge of said document at either said sensor or said camera;
turning off a drive mechanism when said leading edge of said document is detected;
scanning said document with said camera;

detecting a trailing edge of said document at either said sensor or said camera; and

starting said drive mechanism when said trailing edge of said document is detected.

wherein said drive mechanism is started when said trailing edge of said document is detected by said sensor and said camera.

12. (original) A scanner for capturing an image of a document comprising:

a transport mechanism for moving said document;

a sensor for detecting a leading edge and trailing edge of said document;

a first camera for scanning a first side of said document, detecting a leading edge of said document, and detecting a trailing edge of said document; and

a controller which:

1) receives a digital signal from said first camera when said first camera detects said document in a field of said first camera;

2) receives a digital signal from said sensor when said sensor detects said document in a field of said sensor;

wherein said controller:

1) starts image capture by said first camera of said first side of said document when a leading edge of said document is detected by either said sensor or said first camera, and stops image capture of said first side of said document when a trailing edge of said document is detected by either said sensor or said first camera; and

2) turns off a drive mechanism when a leading edge of said document is detected by either said sensor or said camera, and starts a drive mechanism when a trailing edge of said document is detected by both said sensor and said camera.

13. (original) A scanner as in claim 12 comprising:
a second camera for scanning a second side of said document, detecting said leading edge of said document, and detecting said trailing edge of said document and;
said controller:
3) receives a digital signal from said second camera when said second camera detects said document in a field of said second camera;
wherein said controller:
3) starts image capture by said second camera of said second side of said document when a leading edge of said document is detected by either said sensor or said second camera, and stops image capture of said second side of said document when a trailing edge of said document is detected by both said sensor and said second camera.
14. (original) A method of scanning a document comprising:
transporting said document past a sensor;
detecting a leading edge of said document at either said sensor, a first camera, or a second camera;
turning off a drive mechanism when said leading edge of said document is detected by either said sensor, said first camera, or said second camera;
scanning a first side of said document with said first camera;
capturing an image of said first side of said document when said document is in front of said first camera;
capturing an image of said second side of said document when said document is in front of said second camera;
detecting a trailing edge of said document by either said sensor, said first camera, or said second camera; and

starting said drive mechanism when said trailing edge of said document is detected by said sensor, said first camera, and said second camera.